Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Section 73.622(b),	)	MM Docket No. 01-54
Table of Allotments,	)	RM-9918
Digital Television Broadcast Stations.	)	
(Nampa, Idaho)	)	

To: The Chief, Mass Media Bureau

COMMENTS IN OPPOSITION

Oregon Public Broadcasting (OPB), through its attorneys and pursuant to Section 1.415 of the rules, hereby comments on the Notice of Proposed Rule Making to substitute DTV Channel 44 for allotted DTV Channel 13 at Nampa, Idaho. In support thereof, the following is shown:

1. OPB is a nonprofit corporation that operates a network of public television stations serving most of Oregon, including noncommercial educational Station KTVR, La Grande, Oregon. Station KTVR operates on NTSC Channel *13. As shown herein, that station provides a first service or second service, and a first public television service, to a number of people.

2. This proceeding was initiated at the instance of Idaho Independent Television, Inc. ("IIT"), licensee of commercial television Station KTVR, NTSC Channel 12, Nampa. IIT wants to operate on DTV Channel 13, instead of allotted DTV Channel 44, in order to save money. IIT noted also that adjacent-channel NTSC and DTV operations are desirable in terms of reducing the likelihood of interference.

3. The proposed allotment would result in less than 1% interference to the signal of OPB's station, well below the 2% *de minimi* standard established by the Commission. Nonetheless, the proposed allotment presents a compelling public interest issue. As shown in the attached Engineering Statement, IIT's operations on the proposed

channel would result in interference to the OPB signal that would cut off 102 people from their only primary television service and would cut off close to 300 people from their only noncommercial educational primary television service. The proposal would also wreak havoc on OPB's established coverage by translator stations within its station's Grade B contour. It would also interfere with translator inputs and cable feeds in a manner that would cut off the OPB signal to thousands of people. While translators and cable feeds are not guaranteed protection under the rules, this incidental impact provides a good reason for the Commission to look very carefully at the effect of the proposal on reception of OPB's full-service station.

4. IIT does not allege any problems with its current DTV allotment of Channel 44. While OPB is sympathetic to any licensee's efforts to save money in DTV conversion and operation, such savings should not come at the expense of access by television viewers to their only off-the-air service, or their only off-the-air public television service. If the Commission were to substitute channels as proposed, it would for IIT's convenience undercut its primary allotment policy of providing a first service to every prospective television viewer and also its policy to provide a second signal to viewers. *Sixth Report and Order on Television Allocations*, 41 FCC 148 (1952).

5. We are dealing here with a largely rural area with low population figures. A hundred, a few hundred, or a few thousand people affected by any proposal constitutes a significant issue. The Commission's normal *de minimi* standard simply does not work here, where the small percentage of people affected by interference have no alternative primary service. OPB, which is in part State funded, has a mandate from the taxpayers and its viewers and supporters to provide what is the sole public television service to this area. The proposed rule amendment would interfere with that service in contravention of the public interest.

WHEREFORE, for the foregoing reasons, OPB respectfully requests that the Commission refrain from amending the Table of Allotments as proposed.

Respectfully submitted,

OREGON PUBLIC BROADCASTING

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ENGINEERING STATEMENT

IN SUPPORT OF COMMENTS IN MM DOCKET NO. 01-54
DIGITAL TELEVISION TABLE OF ALLOTMENTS
NAMPA, IDAHO

PREPARED FOR
OREGON PUBLIC BROADCASTING

4/2001

This Engineering Statement has been prepared on behalf of Oregon Public Broadcasting ("OPB") in support of comments filed in MM Docket No. 01-54. The proponent in that proceeding, Idaho Independent Television ("IIT"), licensee of KTRV(TV), NTSC Channel 12, Nampa, Idaho, has requested the substitution of DTV Channel 13 for its assigned DTV Channel 44.

OPB is the licensee of KTVR(TV), NTSC Channel *13 at La Grande, Oregon.[1] IIT's engineering analysis indicates that their Nampa 13 proposal meets the 2 percent criterion for de minimis impact that is applied in evaluating requests for modification of initial DTV allotments under §73.623(c)(2), with respect to KTVR(TV), and also with respect to KIPT(TV), which operates on NTSC Channel *13 at Twin Falls, Idaho.

On behalf of OPB, an analysis has been made of the impact which the Nampa 13 proposal will have upon the reception of KTVR(TV) La Grande. In general, this analysis agrees roughly with IIT's finding that the Nampa 13 proposal would cause just under 0.8% additional population interference to KTVR(TV) La Grande. This simple figure, however, does not paint the full picture of the impact which the Nampa 13 proposal will have upon reception of KTVR(TV) La Grande. Grant of the Nampa 13 proposal will deprive over 100 persons of their only primary television service, many more of their only non-commercial

[1]Due to the fact that the call letters of KTVR(TV) La Grande and KTRV(TV) Nampa are so similar, this Engineering Statement will hereafter to the KTRV proposal as the "Nampa 13" proposal, in an effort to avoid confusion.

television service, and will affect many more people due to interference to translator input frequencies.

Area Served by KTVR(TV)

La Grande is a city of approximately 12,000 persons located in Union County, in the northeast corner of Oregon. The territory surrounding La Grande is extremely rugose, and population centers are very few and far between, situated in isolated valleys between the numerous mountain ranges which criss-cross this area. It is extremely difficult to provide over-the-air television service to these far-flung, isolated communities. Nevertheless, OPB takes very seriously it's legislative mandate to bring free, over-the-air, non-commercial service to all the residents of Oregon.[2] OPB purchased KTVR(TV) in 1978, and since that time has endeavored to improve and expand service to the residents of this region.

The population served by KTVR(TV) is not large by any standards. There are just 70,611 persons (1990 Census) living within 21,730 km² covered by the KTVR(TV) Grade B contour, a population density of just 3.25 persons per square kilometer. Of this population, just 39,000 persons are predicted to receive a Grade B signal from KTVR(TV), according to the DTV Table contained in the Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders in MM Docket No. 87-268.

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[2]OPB receives approximately 10% of its operating budget from the Oregon State Legislature. These funds are specifically earmarked to provide and maintain broadcast service to the small rural communities of Oregon, most of which are isolated from the state's major population centers by high terrain and great distances.

For many of these people, KTVR(TV) provides the first and only free, over-the-air, primary television service. Indeed, KTVR(TV) provides the only non-commercial primary television service to nearly all of its entire Grade B contour area.[3]

Only eight primary service television stations have Grade B contours which overlap the Grade B contour of KTVR(TV). These stations are:

KLEW(TV)	Ch. 3	Lewiston, ID
KBKI(TV)	Ch. 9	Walla Walla, WA
KFFX(TV)	Ch. 11	Pendleton, OR
KUID(TV)	Ch. *12	Moscow, ID
KBPD(TV)	Ch. 16	La Grande, OR
KEPR(TV)	Ch. 19	Pasco, WA
KNDU(TV)	Ch. 25	Richland, WA
KVEW(TV)	Ch. 42	Kennewick, WA

Of these eight stations, KBKI(TV) and KBPD(TV) are unbuilt construction permits. The attached map Exhibit 1 depicts the Grade B contours of the remaining six stations with respect to the Grade B contour of KTVR(TV) La Grande. This map depicts the extents of the areas to which KTVR(TV) provides the first, second, and third primary television services.[4]

Clearly, the true impact of the Nampa 13 proposal cannot be reflected as a simple percentage of the KTVR(TV) Grade B population, because many of the people who will lose

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[3]The only other non-commercial primary television station which provides Grade B service to any portion of the KTVR(TV) Grade B service area is KUID(TV) Moscow, which overlaps a small area in the north end of the KTVR(TV) service area.

[4]Note that these areas would be diminished, but not eliminated, by the activation of KBKI(TV) Walla Walla and KBPD(TV) La Grande.

service from KTVR(TV) will not just lose reception of one television station. They will lose reception of their only non-commercial television station, any many will lose their only primary television service.

Interference Analysis

A detailed interference study has been conducted to evaluate the impact which the proposed operation of Nampa 13 will cause to KTVR(TV) La Grande.

The time-shared "HDTV" computer program offered by the National Telecommunications and Information Administration's *TA Services* in Boulder, Colorado was employed as the method for coverage and interference protection. The HDTV computer program has been developed in close coordination with the Commission's OET staff, and utilizes similar methodology as the computer program used by the Commission to develop the DTV Table of Allotments. Predictions included "clipping" the extent of protected coverage as specified under §73.623(c)(2) at the Grade B contour distance for analog stations per §73.684 and at the DTV coverage contour distance for DTV assignments per §73.625(b). It is believed that the HDTV program offered by *TA Services* is compliant with the FCC's Office of Science and Technology Bulletin 69 Longley-Rice Methodology for Evaluating TV Coverage and Interference ("OET-69"), July 2, 1997.

It is not necessary to establish "baseline" data in this particular case, since the original DTV Channel 44 allotment at Nampa would have no impact upon KTVR(TV) La Grande, and since the HDTV program reports the "unmasked" interference contribution from Nampa 13.

HDTV program input data for the Nampa 13 proposal, following the guidelines established under OET-69, is supplied as Table 1.

The interference study results (shown in Table 2) indicate that the proposed Nampa 13 facility is predicted to cause interference to 290 persons within the KTVR(TV) Grade B contour. This is 0.74% of the 39,000 persons which receive Grade B service from KTVR(TV).

The results also show that KXLY-DT Ch. 13 at Spokane, Washington, is predicted to cause unmasked interference to 130 persons within the KTVR(TV) Grade B contour. This study was repeated, with interference effects from KXLY-DT excluded from consideration. The study which excluded KXLY-DT reached identical results regarding the Nampa 13 proposal, i.e., that the Nampa 13 proposal would cause interference to 290 persons within the KTVR(TV) Grade B contour. This is hardly surprising, considering that KXLY-DT is located due north of KTVR(TV) La Grande, while the Nampa 13 proposal is located at a bearing of 143 degrees True. Since KXLY-DT and the Nampa 13 proposal would affect quite different areas of the KTVR(TV) La Grande service area, and the present concern is with the Nampa

13 proposal, the remainder of this Engineering Statement will exclude interference effects from KXLY-DT.

The attached interference study map (Exhibit 2) graphically depicts the interference impact which the Nampa 13 proposal will have upon reception of KTVR(TV). On this map, pink shading indicates areas which are predicted to receive interference-free Grade B service from KTVR(TV), blue shading indicates areas where DTV interference is masked by existing NTSC interference, and green shading indicates areas which would otherwise receive Grade B service from KTVR(TV) but which would be subject to unmasked interference from the Nampa 13 proposal.

It is clear from Exhibit 2 that the primary areas of interference are located in Union and Baker Counties, with Baker County receiving the brunt of the impact.

Loss of Primary Television Service

Map Exhibit 3 correlates the interference analysis in Exhibit 2 to the 1990 Census "centroids" in the area of greatest impact. On this map, green shading indicates the unmasked Nampa 13 interference areas, and small crosses mark the 1990 Census centroids. Individual centroids which are impacted by interference are marked with their population. This map also shows the location of the Grade B contour of KFFX(TV), south of which KTVR(TV) La Grande provides the first primary television service.

The population of individual centroids which are impacted by unmasked interference from the Nampa 13 proposal have been counted, revealing that 102 persons in this area will lose their only primary television service if the Nampa 13 proposal is approved. These persons would also lose their only non-commercial primary television service.

Effect Upon Translators

In addition to direct over-the-air service, KTVR(TV) La Grande also provides direct feeds to a number of translator stations serving isolated population centers. These direct feeds will be severely impacted by co-channel interference from Nampa 13.

Translator **K48DC** operates from a transmitter site on Beaver Mountain, providing Grade A equivalent service to 9,085 persons and Grade B equivalent service to an additional 967 persons, for a total service of 10,052 persons (Figures are 1990 Census, and based on Longley-Rice analysis using the HDTV program). Translator K48DC receives KTVR(TV) La Grande directly off-the-air. As shown in the attached terrain path plots, the Beaver Mountain transmitter site is line-of-sight to both the KTVR(TV) transmitter site on Mount Fanny and the Nampa 13 transmitter site at Deer Point. While the distance between Beaver Mountain and KTVR(TV) La Grande is 79.1 km, compared with 163.9 km between Beaver Mountain and Nampa 13, the higher power level of Nampa 13 essentially equalizes the signal strengths of the two signals at Beaver Mountain. KTVR(TV) La Grande has a Longley-Rice F(50,50) field strength of 77.7 dBu at Beaver Mountain, while Nampa 13

would have a Longley-Rice F(50,10) field strength of 77.1 dBu at that site.[5] These values are just 0.6 dB apart, far less than the 34 dB D/U protection ratio applicable for co-channel DTV-into-NTSC, as established in the DTV proceedings, and as listed in §73.623 of the Commission's Rules.

Given the parity of the two incoming co-channel signals, it is highly likely that, even with a good directional receiving antenna at the Beaver Mountain transmitter site of K48DC, the digital signal of Nampa 13 will significantly raise the noise floor, causing damaging interference to the reception of KTVR(TV) La Grande.

Translator **K08KW** operates from a transmitter site on Lookout Mountain, providing Grade A equivalent service to 4 persons and Grade B equivalent service to an additional 186 persons, for a total service of 190 persons (Figures are 1990 Census, and based on Longley-Rice analysis using the HDTV program).[6] Translator K08KW receives KTVR(TV) La Grande directly off-the-air. As shown in the attached terrain path plots, the Lookout Mountain transmitter site is line-of-sight to both the KTVR(TV) transmitter site on Mount

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[5]These are line-of-sight paths, and the "free space" fields are also equivalent. Using the free space formula where

Field strength in dBu = 106.9 + ERP in dBk - 20log(distance)

the KTVR(TV) free space field at Beaver Mountain is 77.5 dBu and the Nampa 13 free space field at Beaver Mountain is 74.9 dBu.

[6]It should be noted that the FCC TV Engineering Database does not contain the correct directional pattern information for K08KW. While the database indicates that K08KW operates with a single HDCA-5 antenna oriented at 250 degrees True; K08KW is actually authorized to operate with two HDCA-5 antennas, one oriented at 30 degrees True with 75% power, and one oriented at 250 degrees True with 25% power.

Fanny and the Nampa 13 transmitter site at Deer Point. While the distance between Lookout Mountain and KTVR(TV) La Grande is 85.7 km, compared with 133.6 km between Lookout Mountain and Nampa 13, the higher power level of Nampa 13 essentially equalizes the signal strengths of the two signals at Lookout Mountain. KTVR(TV) La Grande has a Longley-Rice F(50,50) field strength of 77.1 dBu at Lookout Mountain, while Nampa 13 would have a Longley-Rice F(50,10) field strength of 78.5 dBu at that site.[7] These values are just 1.4 dB apart (and in Nampa 13's favor), far less than the 34 dB D/U protection ratio applicable for co-channel DTV-into-NTSC, as established in the DTV proceedings, and as listed in §73.623 of the Commission's Rules.

Given the parity of the two incoming co-channel signals, it is highly likely that, even with a good directional receiving antenna at the Lookout Mountain transmitter site of K08KW, the digital signal of Nampa 13 will significantly raise the noise floor, causing damaging interference to the reception of KTVR(TV) La Grande.

The loss the input signal to translator K08KW will have effects beyond the population able to receive that translator directly, since K08KW provides the off-air feed for translator **K10NF**. Translator K10NF operates from a transmitter site on a hilltop near Halfway, Oregon, providing Grade A equivalent service to 35 persons and Grade B equivalent service to an additional 546 persons, for a total service of 581 persons (Figures are 1990 Census, and based on Longley-Rice analysis using the HDTV program).

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[7]Free space fields at Lookout Mountain are 76.8 dBu for KTVR(TV) and 76.9 dBu for Nampa 13.

Effect Upon Cable Systems

In addition to feeding translator K10NF, translator K08KW also serves as the feed for two cable systems serving isolated communities in east Baker County, at Richland and Halfway. Eagle Valley Communications provides service to 170 subscriber households in the Richland area, and Charter Cable provides service to 100 subscriber households in the Halfway area. Assuming an average of two persons per household,[8] the loss of the input signal to these cable systems will deprive 340 persons in the Richland area, and 200 persons in the Halfway area, of their Oregon Public Broadcasting service.

[8]The 1990 Census average population per household was 2.1 persons for Richland, and 2.0 persons for Halfway.

Conclusion

To say simply that the Nampa 13 proposal will cause interference to 0.74% of the population served by KTVR(TV) La Grande is to overlook the negative public interest impacts which grant of the Nampa 13 proposal will have.

- Much of the population which would be impacted by direct interference to reception of KTVR(TV) La Grande depends upon that station as their only primary, over-the-air television service, and their only primary non-commercial over-the-air television service. Loss of KTVR(TV) service to these persons would be contrary to the first television allotment priority as set forth in the Sixth Report and Order on Television Allocations, 41 FCC 148 (1952), i.e. to "provide at least one television service to all parts of the United States."
- Additional population over a wide area depends upon KTVR(TV) La Grande as their second primary, over-the-air television service, and their only primary non-commercial over-the-air television service. Loss of KTVR(TV) service to these persons would be contrary to the third television allotment priority, i.e. to "provide a choice of at least two television services to all parts of the United States."
- Loss of a reliable input signal to translator K48DC would deprive as many as 10,052 persons of their over-the-air service from KTVR(TV) La Grande via that translator.

- Loss of a reliable input signal to translator K08KW would deprive as many as 190 persons of their over-the-air service from KTVR(TV) La Grande via that translator.
- Loss of a reliable input signal to translator K08KW would affect the input signal of translator K10NF, and deprive as many as 581 persons of their over-the-air service from KTVR(TV) La Grande via that translator.
- Loss of a reliable input signal to translator K08KW would affect the off-air feeds of cable systems in Richland and Halfway, and deprive as many as 540 persons of their service from KTVR(TV) La Grande via those cable systems.

Taken in aggregate, the combined population losses to KTVR(TV) La Grande related to retransmission on translators and cable systems is 11,363 persons. To be sure, many persons are double-counted in that figure (e.g., some persons who would lose cable feeds may also lose off-air translator feeds). But even if one presumes that just one-quarter of that total represents actual affected population, that still means that an additional 2,841 persons will lose their service from KTVR(TV), which is ten times the number shown to be affected by the Longley-Rice interference study.

Table 1
Interference Analysis Input Data
Nampa 13 Proposed DTV Allotment

Communications System Performance Model
Input Summary
14-Dec-00 12:21:19

Process Filename: CS038Dec1400C.ques

1)	Model:	Point-to-point irregular terrain model
2)	Output option:	Field intensity
3)	Length units:	Metric (km and m)
4)	Service Application:	Broadcast
5)	Results option:	None
	FAX number:	000-000-0000
6)	Location variability:	50.00 %
7)	Time availability:	10.00 %
8)	Situation variability:	50.00 %
10)	Frequency:	213.000 MHz
	Frequency offset( )	
11)	Polarization:	Horizontal
12)	Conductivity:	.005 S/m
13)	Dielectric constant:	15.0
14)	Climate zone:	Continental temperate
20)	Transmitter name:	DKTRV-13
21)	Transmitter location:	

Latitude		Longitude	
Deg N		Deg W	
43.7550	43,45,18.0	116.0978	116, 5,52.0

22)	Xmtr site elevation:	2133.3 m	6999.1 ft
23)	Xmtr ant ht AMSL:	2216.00 m	7270.34 ft
23)	Xmtr ant ht AGL:	82.67 m	271.22 ft
24)	Transmitter radiation option:		ERP
24)	Effective Radiated Power:		17000.0 W
	Effective Isotropic Radiated Power:		27890.0 W
30)	Transmitter ant horiz pattern:		Omnidirectional

Table 1
Interference Analysis Input Data
Nampa 13 Proposed DTV Allotment

32) Transmitter ant vert pattern: Beam tilt, directional

Vertical directional pattern data

No.	Elevation (deg)	Relative field radiation	Gain relative to pattern maximum (dB)
1	-10.00	.15000	-16.48
2	-9.00	.15000	-16.48
3	-8.00	.15000	-16.48
4	-7.00	.15000	-16.48
5	-6.00	.15000	-16.48
6	-5.00	.20000	-13.98
7	-4.00	.21000	-13.56
8	-3.50	.23500	-12.58
9	-3.00	.26000	-11.70
10	-2.50	.46000	-6.74
11	-2.00	.69000	-3.22
12	-1.50	.88000	-1.11
13	-.75	1.00000	.00
14	.00	.88000	-1.11
15	.50	.69000	-3.22

40) Rcvr ant ht above ground: 9.10 m 29.86 ft
56) Corporate name: TA Services
57) Color option: Color
58) Scale option: No Scale
59) Quality option: High
60) Plot name: LR 50/10

Table 1
Interference Analysis Input Data
Nampa 13 Proposed DTV Allotment

62) Plot center:

Latitude		Longitude	
Deg N		Deg W	
43.7550	43,45,18.0	116.0978	116, 5,52.0

63) Plot size: 550.00 km 341.75 mi

64) Plot Roads option: No Roads

66) Field intensity contour levels:

1) 35.80 dBuV/m

66) Contour Legend label: Field Intensity(dBuV/m)

66) Contour labels and colors:

	Contour levels	Labels	Colors
1	Less than 35.80	Less than 35.80	Blue
2	Greater than 35.80	Greater than 35.80	Clear

67) Political boundaries: County and State

68) Landmarks: None

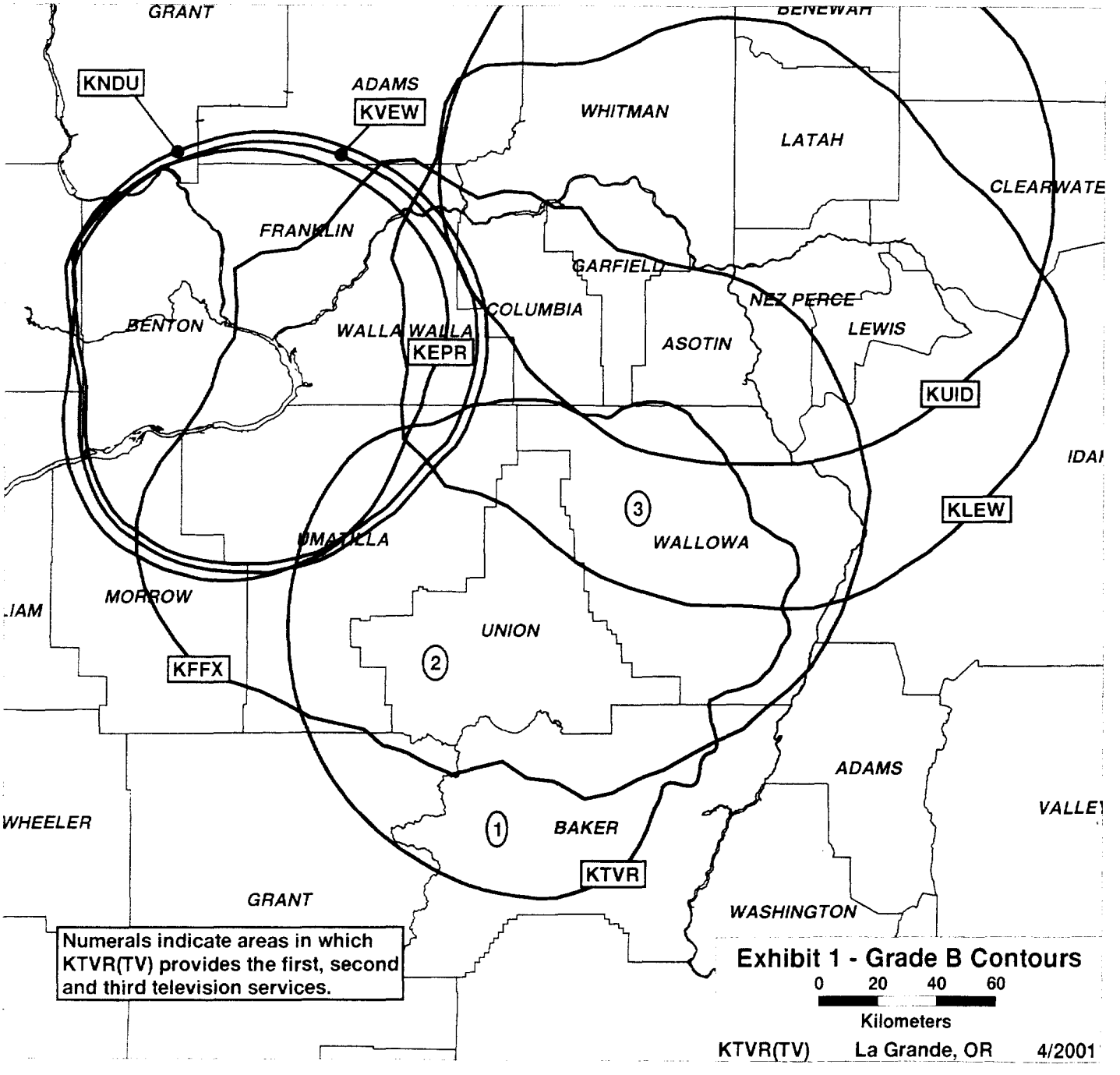
Table 2
Interference Analysis Results Summary

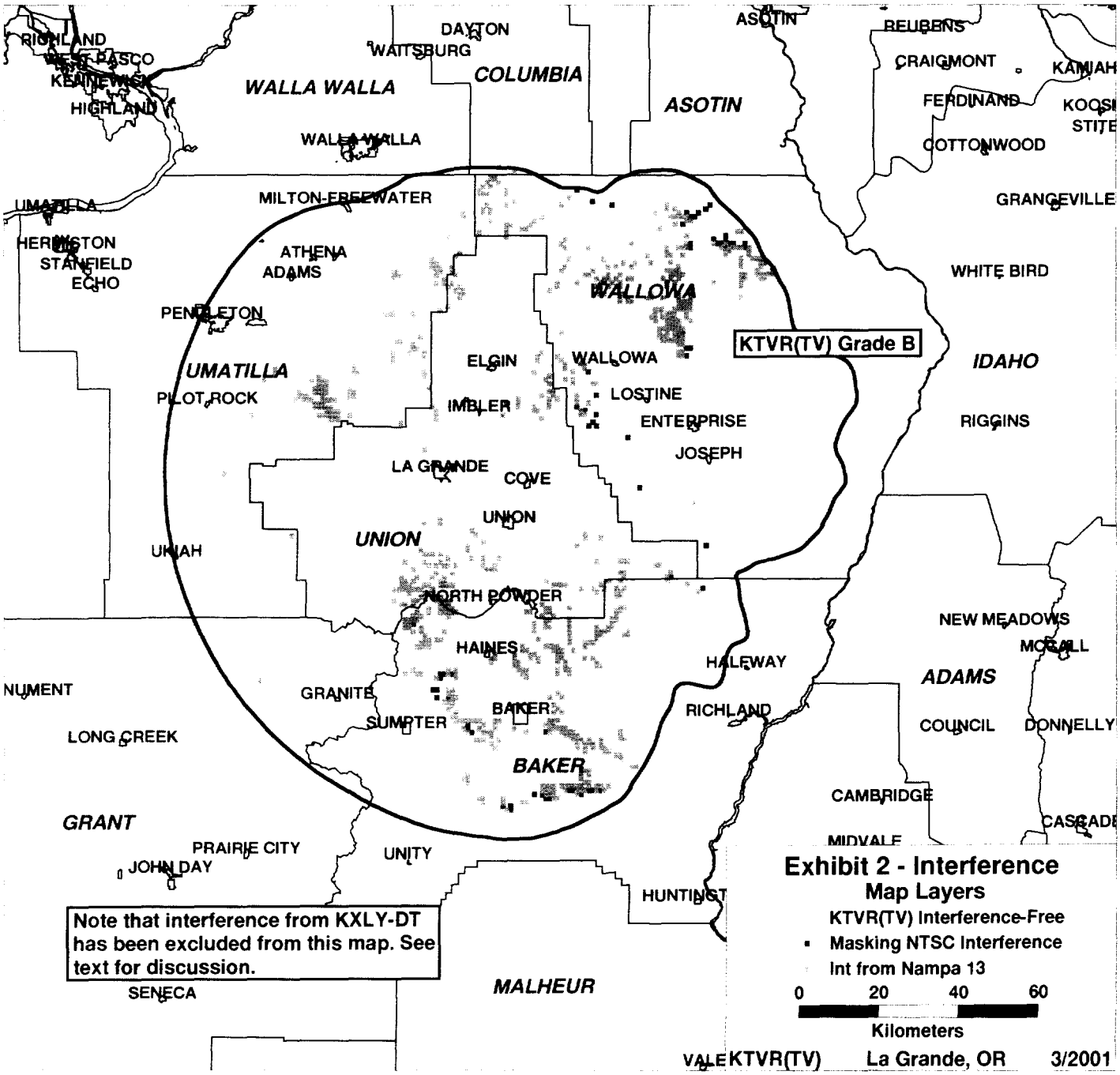
NTSC/DTV Interference study
Desired Station Name: KTVR Station Type: NTSC
City: LA GRANDE State: OR Channel: 13

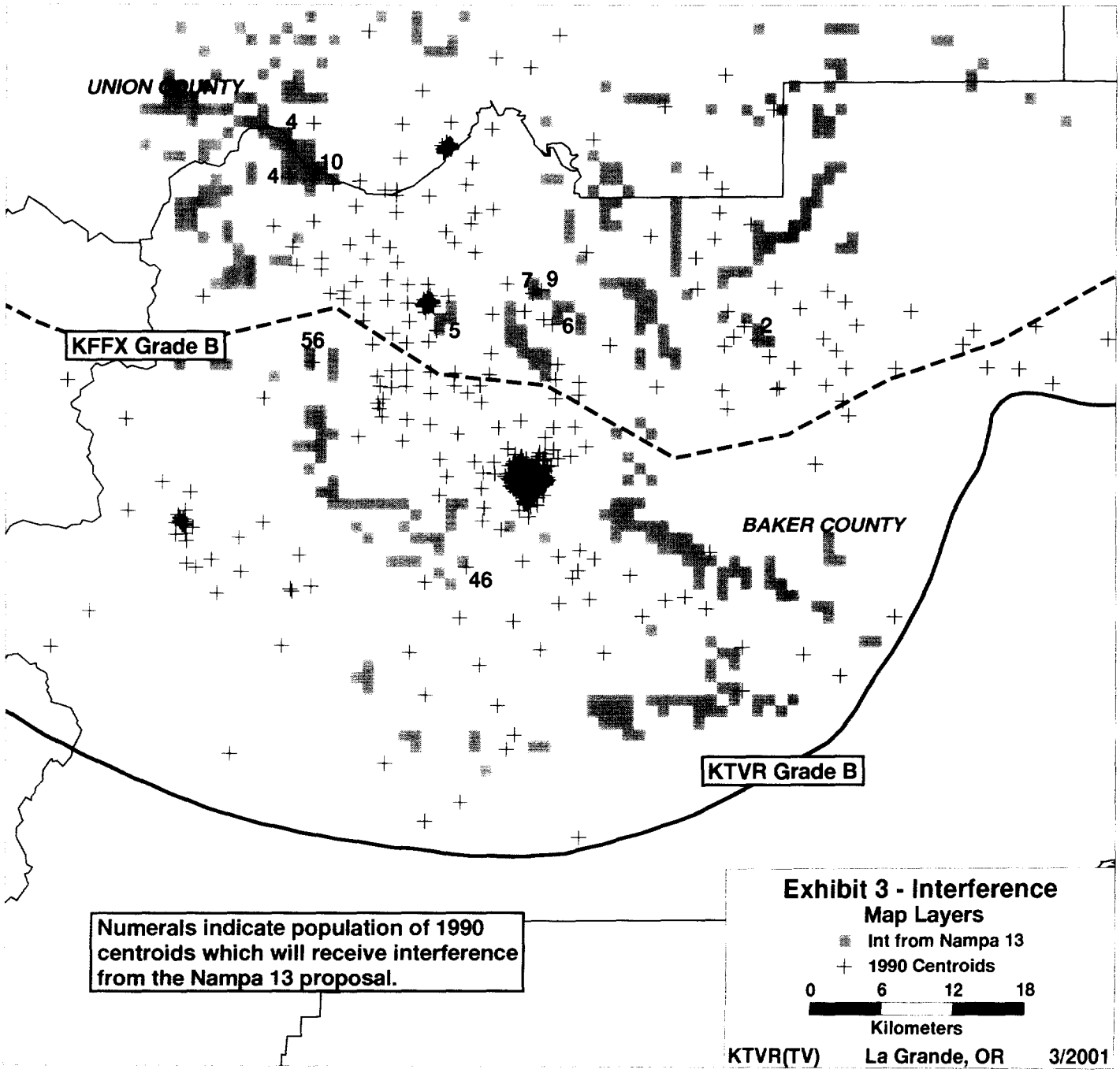
Undesired Station 1 Name: KUIDTV Station Type: NTSC
City: MOSCOW State: ID Channel: 12 km:163.4 mi:101.6 bear: 20.8
Undesired Station 3 Name: KTRV Station Type: NTSC
City: NAMPA State: ID Channel: 12 km:215.9 mi:134.2 bear:142.6
Undesired Station 5 Name: KECITV Station Type: NTSC
City: MISSOULA State: MT Channel: 13 km:343.5 mi:213.4 bear: 55.1
Undesired Station 6 Name: KIPT Station Type: NTSC
City: TWIN FALLS State: ID Channel: 13 km:390.5 mi:242.7 bear:136.1
Undesired Station 7 Name: KPTV Station Type: NTSC
City: PORTLAND State: OR Channel: 12 km:392.0 mi:243.5 bear:275.2
Undesired Station 8 Name: KVALTV Station Type: NTSC
City: EUGENE State: OR Channel: 13 km:449.5 mi:279.3 bear:253.1
Undesired Station 9 Name: KCPQ Station Type: NTSC
City: TACOMA State: WA Channel: 13 km:461.3 mi:286.7 bear:304.4
Undesired Station 2 Name: DKTRV-13 Station Type: HDTV
City: NAMPA State: ID Channel: 13 km:215.9 mi:134.2 bear:142.6
Undesired Station 4 Name: DKXLYTV Station Type: HDTV
City: SPOKANE State: WA Channel: 13 km:294.1 mi:182.8 bear: 9.0
Undesired Station 10 Name: DKOTI-DTC Station Type: HDTV
City: KLAMATH FA State: OR Channel: 13 km:475.0 mi:295.1 bear:222.6

Stations that actually do contribute to interference.

Name	NTSC Int	NonMasked HDTV Int	Population (1990)	Total Area of Int	Population
KUIDTV	19.23 sq km	.00 sq km	2.	19.23 sq km	2.
KTRV	26.83 sq km	.00 sq km	20.	26.83 sq km	20.
KECITV	19.30 sq km	.00 sq km	5.	19.30 sq km	5.
DKXLYTV	.00 sq km	360.45 sq km	130.	4499.67 sq km	134.
DKTRV-13	.00 sq km	442.26 sq km	290.	5508.44 sq km	309.


GRANT
KNDU
ADAMS
KVEW
WHITMAN
LATAH
CLEARWATE
FRANKLIN
GARFIELD
NEZ PERCE
COLUMBIA
BENTON
WALLA WALLA
KEPR
ASOTIN
LEWIS
KUID
IDAI
3
KLEW
UMATILLA
WALLOWA
MORROW
IAM
UNION
2
KFFX
ADAMS
VALLE
WHEELER
1
BAKER
KTVR
GRANT
WASHINGTON
Numerals indicate areas in which KTVR(TV) provides the first, second and third television services.
Exhibit 1 - Grade B Contours
0 20 40 60
Kilometers
KTVR(TV) La Grande, OR 4/2001

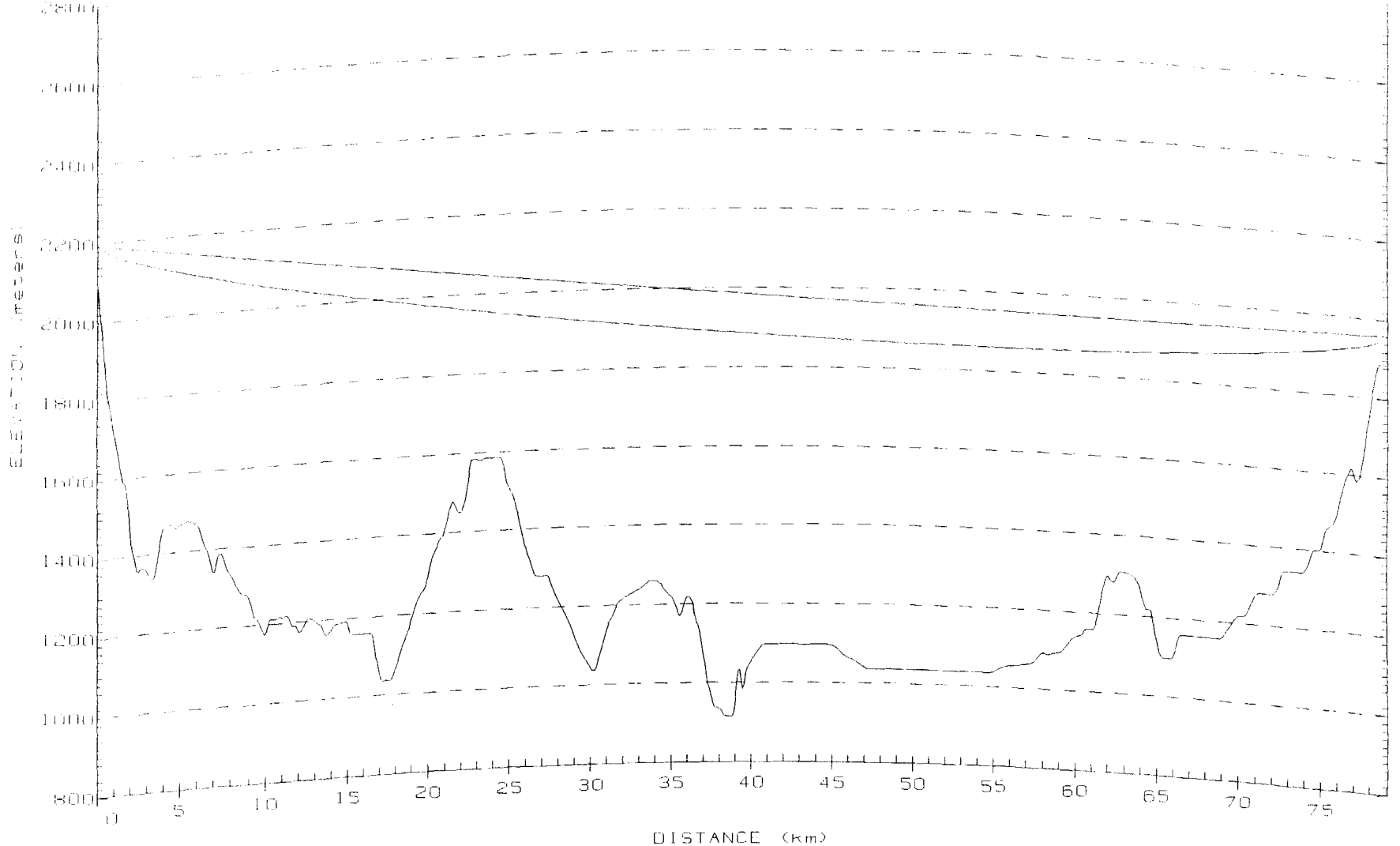

RICHLAND
WEST PASCO
KENNEWICK
HIGHLAND
DAYTON
WAITSBURG
WALLA WALLA
COLUMBIA
ASOTIN
REUBENS
CRAIGMONT
KAMIAH
FERDINAND
COTTONWOOD
WALLA WALLA
MILTON-FREEWATER
UMATILLA
HERMISTON
STANFIELD
ECHO
ATHENA
ADAMS
GRANGEVILLE
WHITE BIRD
WALLOWA
PENDLETON
KTVR(TV) Grade B
IDAHO
UMATILLA
ELGIN
WALLOWA
PILOT ROCK
IMBLER
LOSTINE
ENTERPRISE
JOSEPH
RIGGINS
LA GRANDE
COVE
UNION
UNION
UKIAH
NORTH POWDER
NEW MEADOWS
MCCALL
HAINES
HALFWAY
ADAMS
NUMENT
GRANITE
BAKER
SUMPTER
RICHLAND
COUNCIL
DONNELLY
LONG CREEK
BAKER
CAMBRIDGE
GRANT
PRAIRIE CITY
UNITY
JOHN DAY
MIDVALE
HUNTINGTON
Note that interference from KXLY-DT has been excluded from this map. See text for discussion.
SENECA
MALHEUR
VALE
Exhibit 2 - Interference
Map Layers
KTVR(TV) Interference-Free
Masking NTSC Interference
Int from Nampa 13
0
20
40
60
Kilometers
KTVR(TV) La Grande, OR 3/2001


UNION COUNTY
4
4
10
7
9
6
5
2
56
KFFX Grade B
BAKER COUNTY
46
KTVR Grade B
Numerals indicate population of 1990 centroids which will receive interference from the Nampa 13 proposal.
Exhibit 3 - Interference
Map Layers
Int from Nampa 13
1990 Centroids
0
6
12
18
Kilometers
KTVR(TV)
La Grande, OR
3/2001

Site: KTVR
N 45 38 35 W 117 43 57
Ant. Elev. (AMSL): 2195.0 m
Path azimuth: 182.88 degs.

Frequency: 213.0 MHz
Path Length: 79.1 km
Total Path Loss: 116.9 dB
Excess Path Loss: -.1 dB

Site: K48DC
N 44 35 57 W 117 46 58
Ant. Elev. (AMSL): 1960.0 m
Path azimuth: 2.85 degs.



K Factor: 1.333
Fresnel Zone: .60
3 Second Database - NAD 27
Rain loss: .0 dB
Urban loss: .0 dB
Foliage loss: .0 dB

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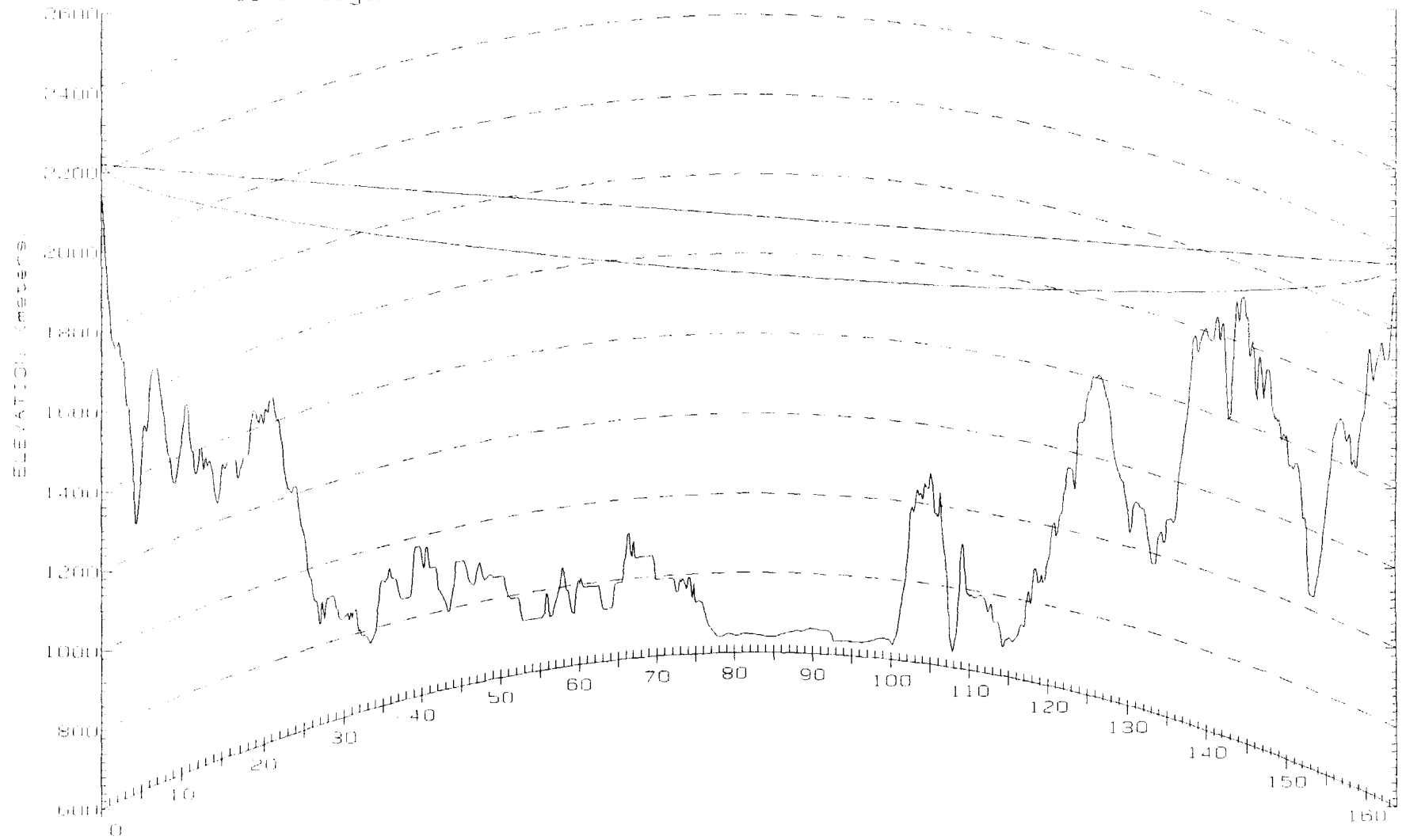
Site: Hampa 13
N 43 45 18 W 116 5 52
Ant. Elev. (AMSL): 2220.0 m
Path azimuth: 305.52 degs.

Frequency: 213.0 MHz
Path Length: 163.9 km
Total Path Loss: 122.9 dB
Excess Path Loss: -.5 dB

Site: K480E
N 44 35 57 W 117 48 58
Ant. Elev. (AMSL): 1900.0 m
Path azimuth: 124.35 degs.



K Factor: 1.333
Fresnel Zone: .60
3 Second Database - NAD 27
Rain loss: .0 dB
Urban loss: .0 dB
Foliage loss: .0 dB

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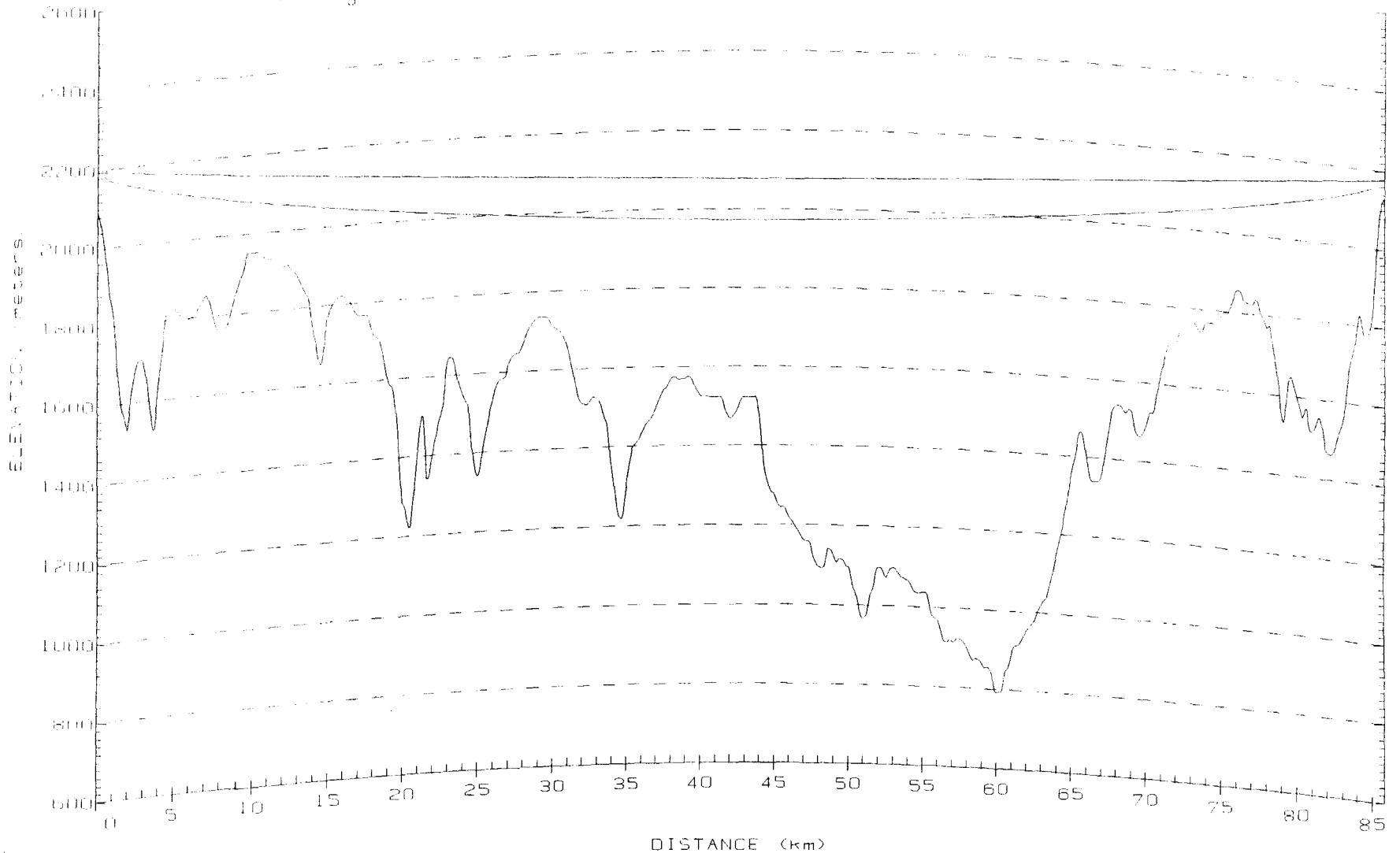
Site: KIVR
N 45 18 35 W 117 43 57
Ant. Elev. (AMSL): 2195.0 m
Path azimuth: 155.18 degs.

Frequency: 213.0 MHz
Path Length: 85.7 km
Total Path Loss: 117.6 dB
Excess Path Loss: -.1 dB

Site: KU8KW
N 44 36 5.4 W 117 16 40
Ant. Elev. (AMSL): 2176.0 m
Path azimuth: 335.50 degs.



K Factor: 1.333
Fresnel Zone: .60
3 Second Database - NAD 27
Rain loss: .0 dB
Urban loss: .0 dB
Foliage loss: .0 dB

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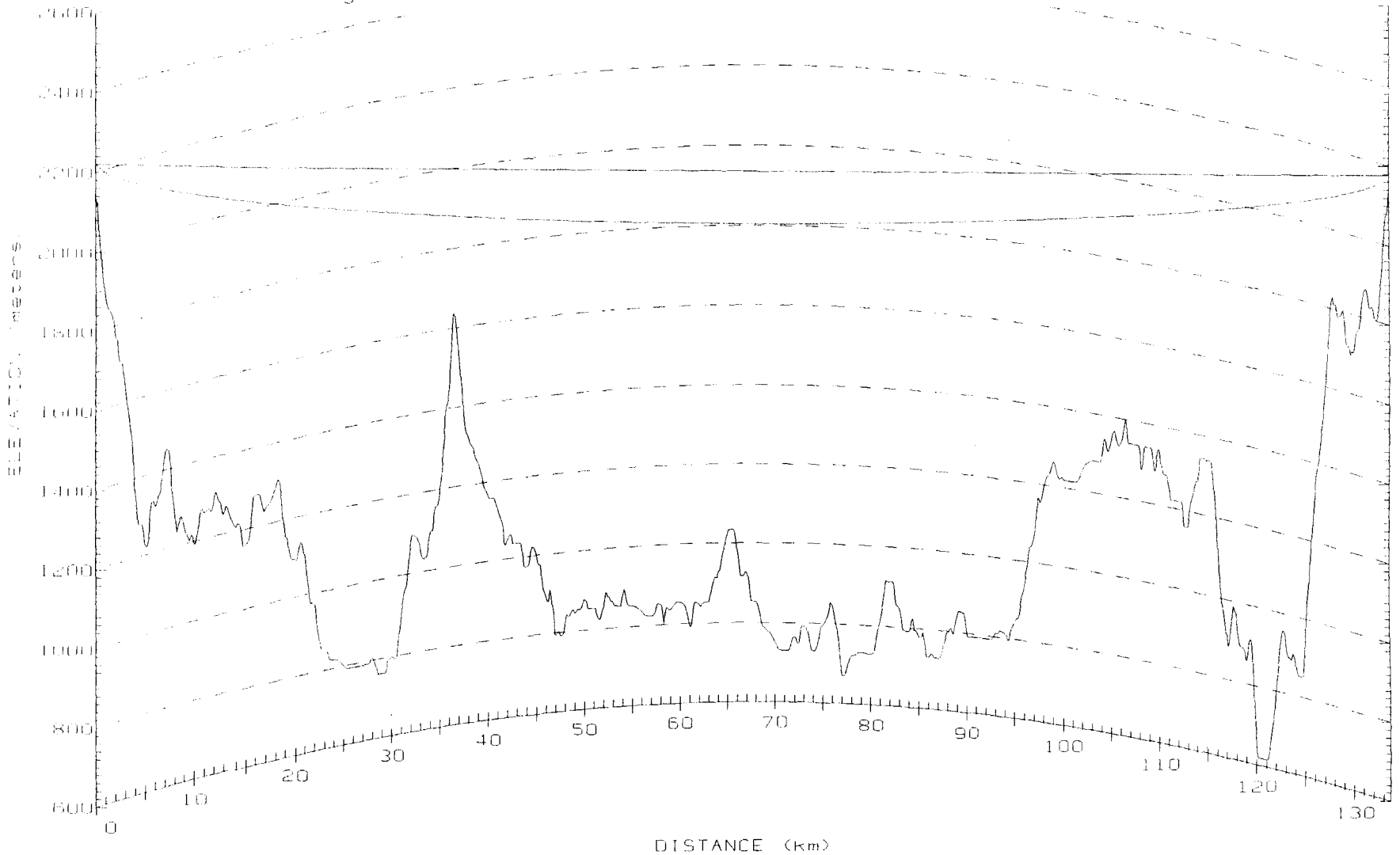
Site: Nampa 13
N 43 45 18 W 116 5 52
Ant. Elev. AMSL: 2220.0 m
Path azimuth: 315.67 degs.

Frequency: 213.0 MHz
Path Length: 133.6 km
Total Path Loss: 121.3 dB
Excess Path Loss: -.3 dB

Site: KO8KW
N 44 36 32 W 117 16 40
Ant. Elev. AMSL: 2176.0 m
Path azimuth: 134.85 degs.



K Factor: 1.333
Fresnel Zone: .60
3 Second Database - NAD 27
Rain loss: .0 dB
Urban loss: .0 dB
Foliage loss: .0 dB

Hatfield & Dawson
Consulting Engineers

Statement of Engineer

This Engineering Statement, which has been prepared in support of comments in MM Docket No. 01-54, has been prepared under my direct supervision. All representations contained herein are true to the best of my knowledge. I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am a partner in the firm of Hatfield & Dawson Consulting Engineers and am Registered as a Professional Engineer in the States of Washington and Alaska.

Signed this 11th day of April, 2001

Stephen S. Lockwood, P.E.

CERTIFICATE OF SERVICE

I, Nancy M. Cassady, Secretary in the law offices of Schwartz, Woods & Miller, do hereby certify that I have on this 16th day of April, 2001, sent by First Class United States mail, postage prepaid, copies of the foregoing **COMMENTS IN OPPOSITION** to

Scott S. Patrick, Esquire
Dow Lohnes & Albertson
1200 New Hampshire Avenue, NW
Suite 800
Washington, DC 20036

Nancy M. Cassady